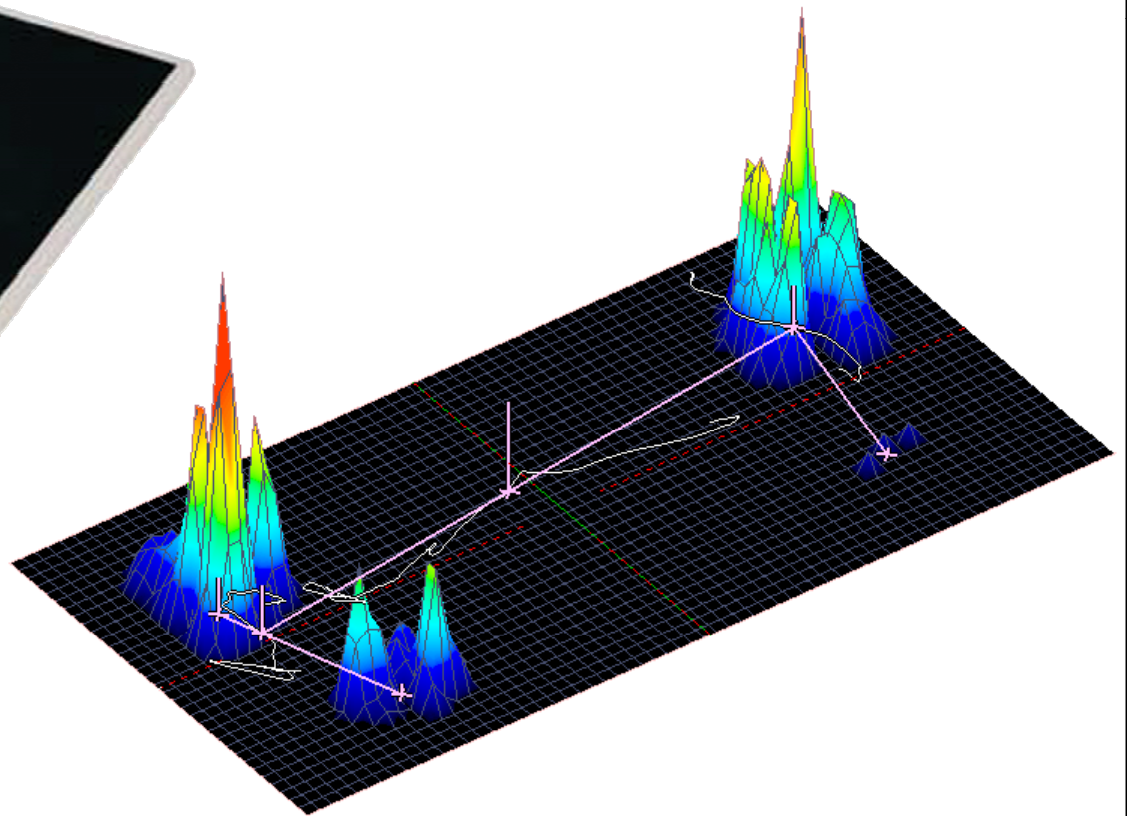
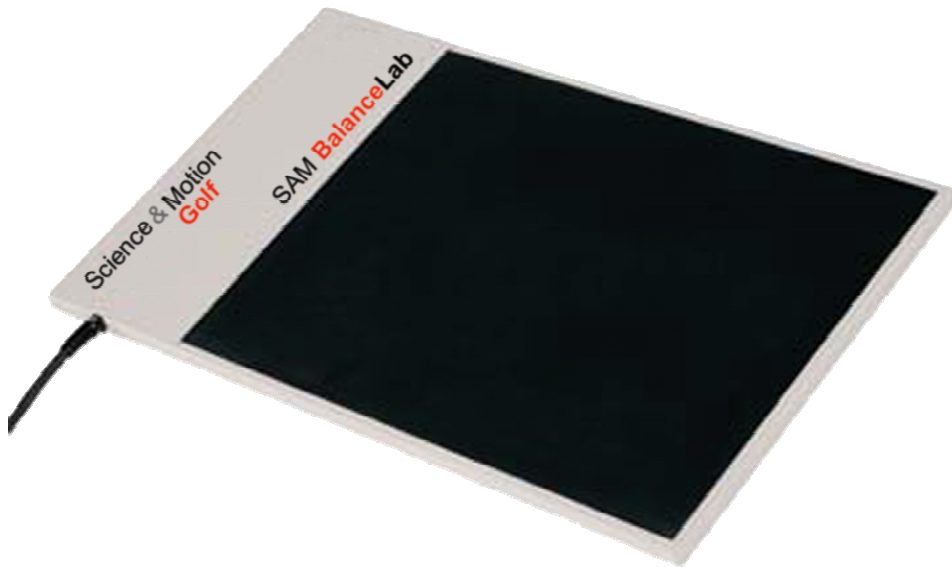


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# SAM BalanceLab

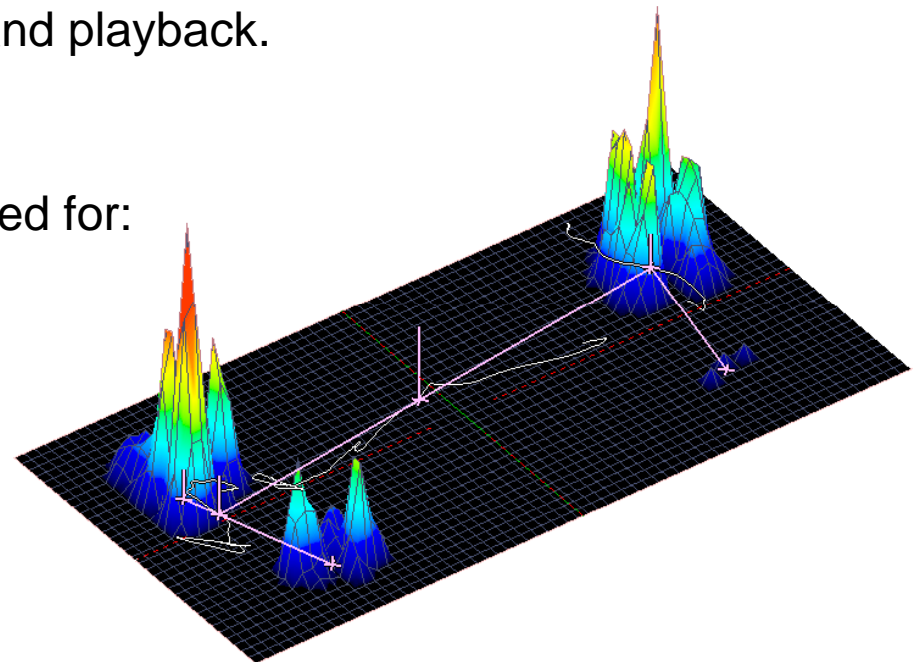


## Hardware Features

- 2560 individual force sensors

## Software Features

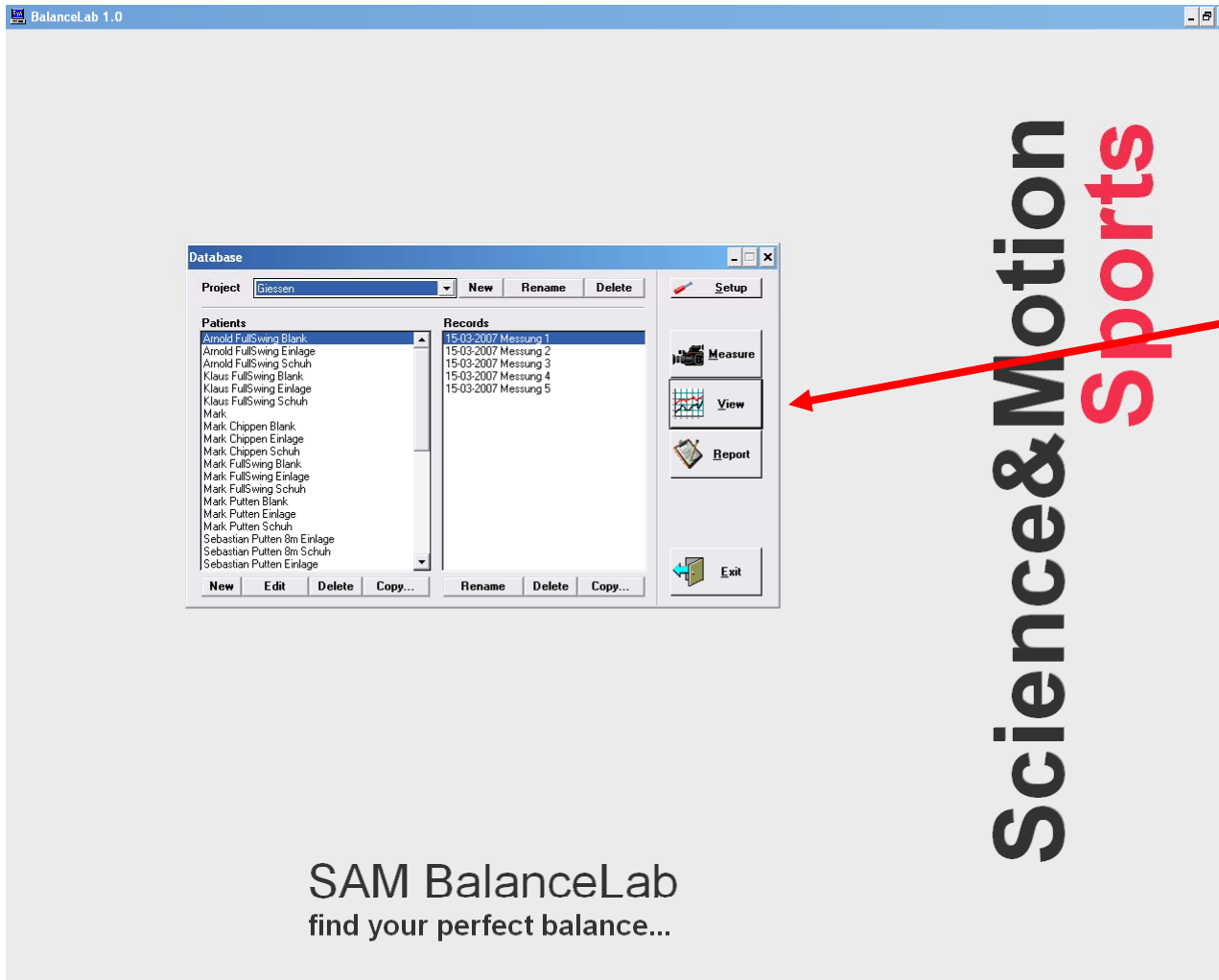
- Project, Player and Data management.
- Video and data synchronization and playback.
- 3D and 2D viewing modes.
- Center of pressure can be displayed for:
  - Right and left foot
  - Toe and heel
  - Total force distribution
- Video analysis drawing tools.



# SAM BalanceLab Software

## Main Screen

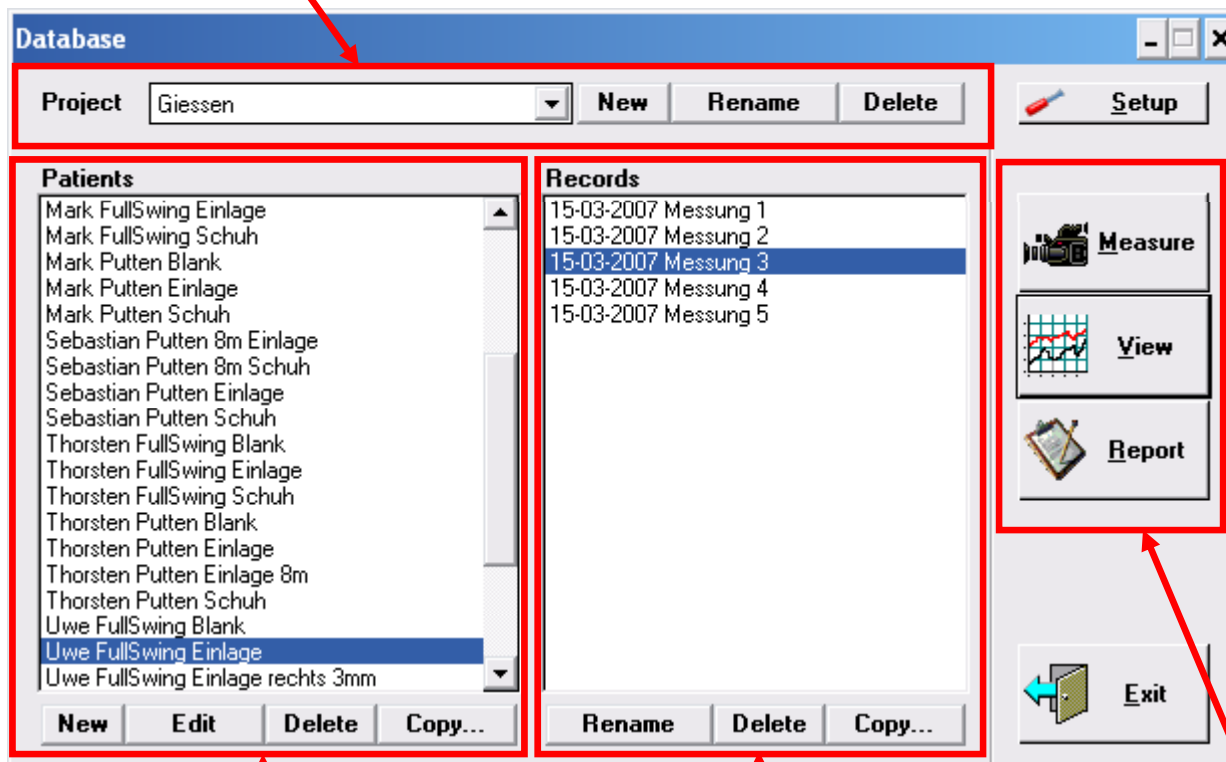
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The screenshot shows the main screen of the software.

The dialog in the center of the screen is the main control center.

## Project management



The control center dialog allows you to manage all your data and the program settings.

From here you can start your measurements and open the result reports.

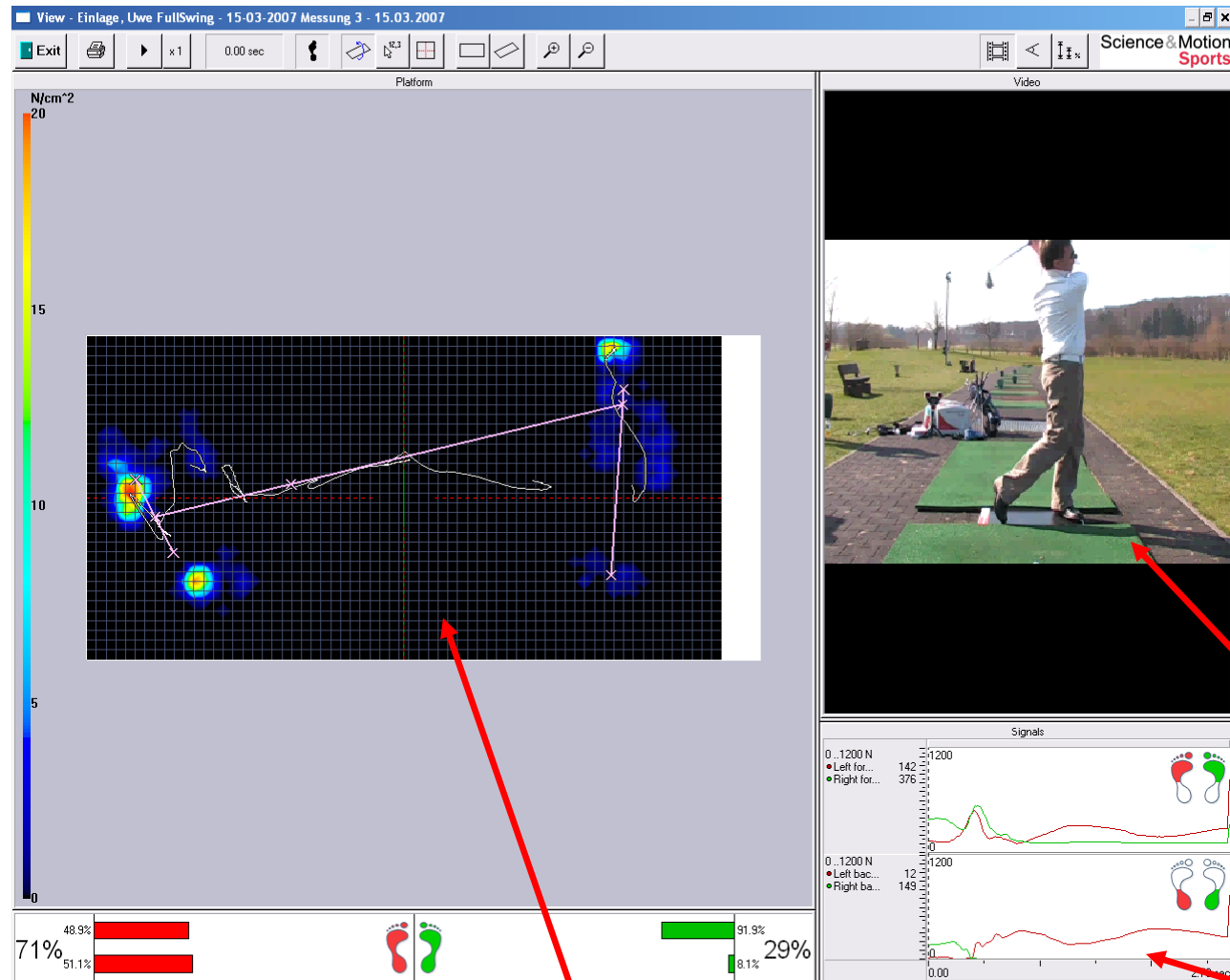
Player management

Data management

Action control

# SAM BalanceLab Software Measurement Screen

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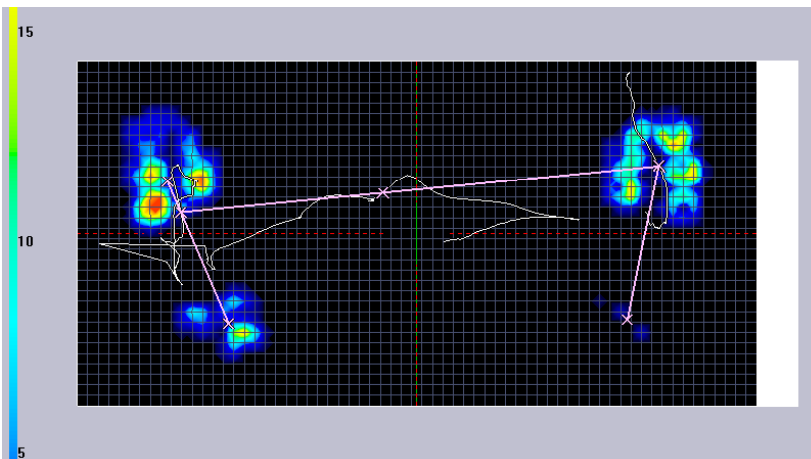
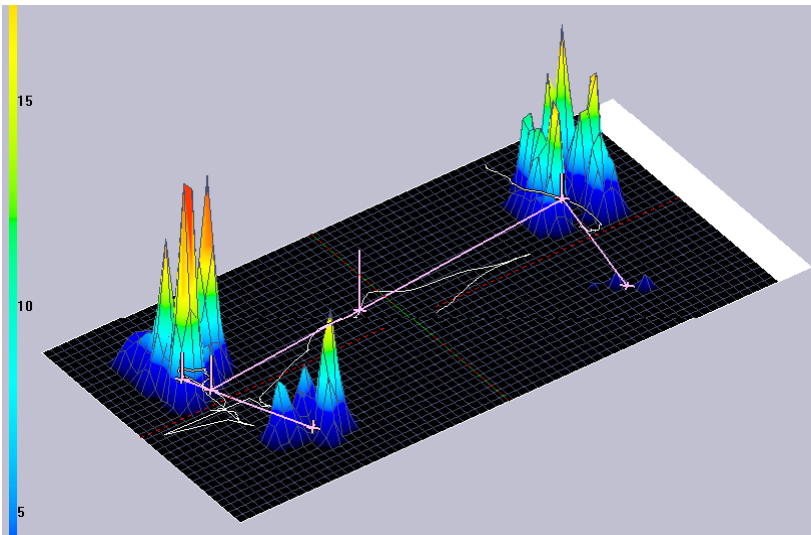
The measurement screen shows live data of force distribution and video.

The force distribution during the swing is recorded and saved for replay with different viewing and analysis options.

Live Video

Time Control

Force Data

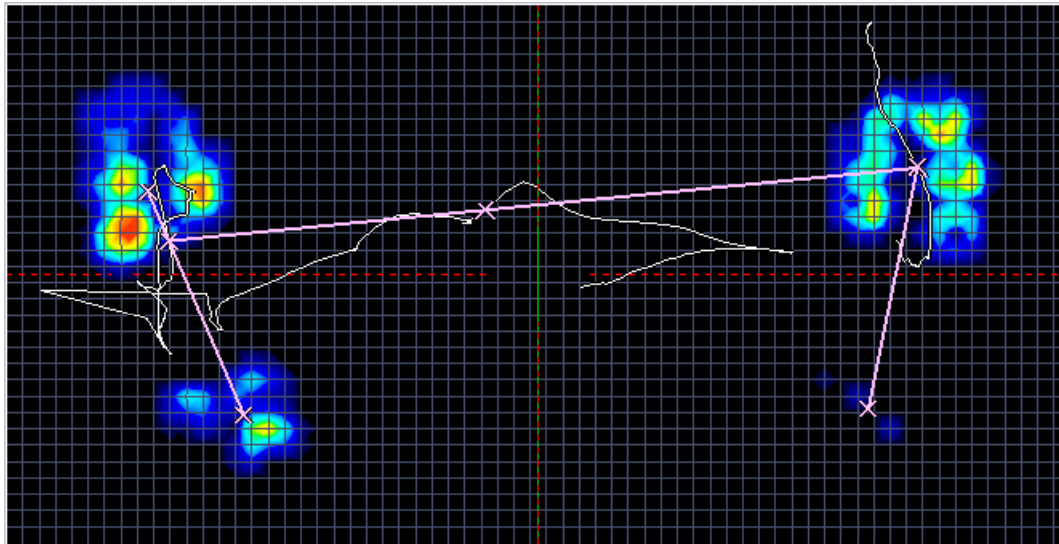


The display of the force distribution in live view and replay view can be switched to 2D or 3D mode.

In 3D mode, the graphics can be viewed from different angles.

Additionally, the center of pressure (COP) is displayed for:

- total force
- left foot
- right foot
- toe
- heel



A special display will show the force distribution separated for left and right foot and for forefoot and backfoot.

This display is also active in live mode.



left foot total

left and right toe

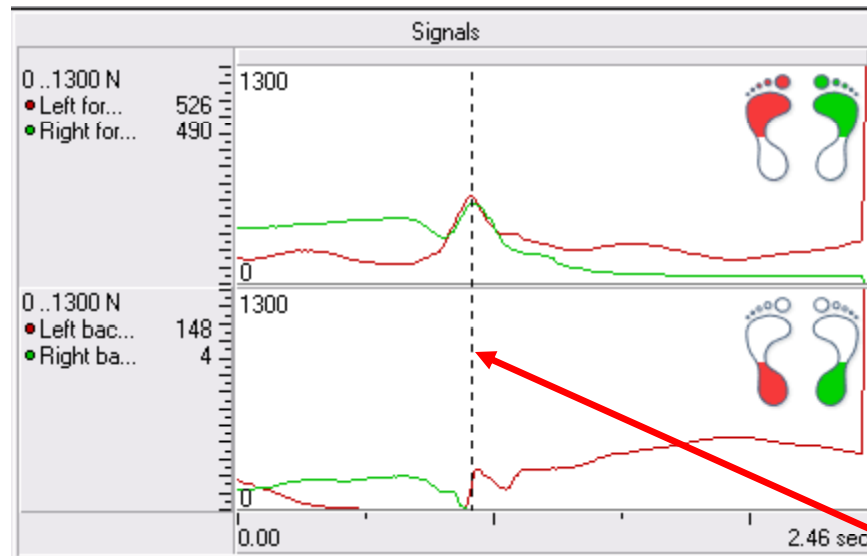
left and right heel

right foot total

# SAM BalanceLab Software

## Replay Time Control

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The replay time control window shows curves of the force distribution of left/right foot and forefoot/backfoot over the recorded time.

During the replay you will see the actual position indicated by the dotted line.

By moving the line with the mouse you can easily display force distribution and video for any position.

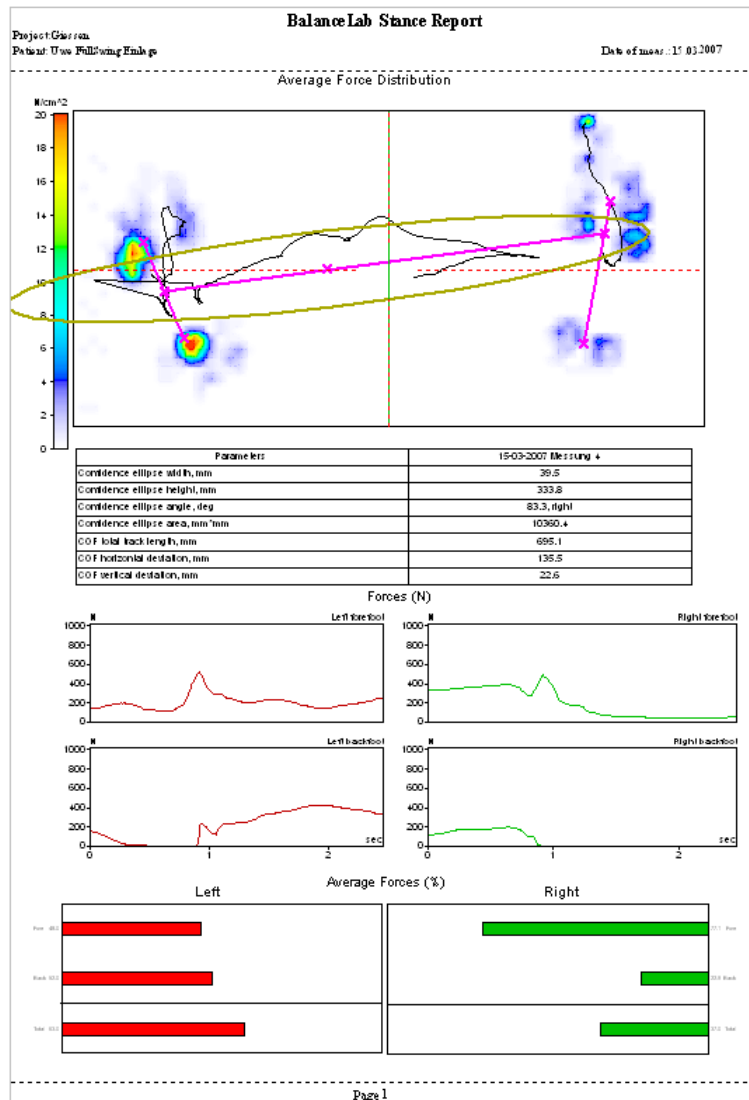


Video can be recorded from any Windows compatible camera additional to the force data.

The video signal can be automatically synchronized to the force data if the camera has a microphone or audio input channel.

In the replay mode the video can be watched in realtime speed, slow motion or single step mode.

Additional feature:  
Angle and distance measurement in the video image.



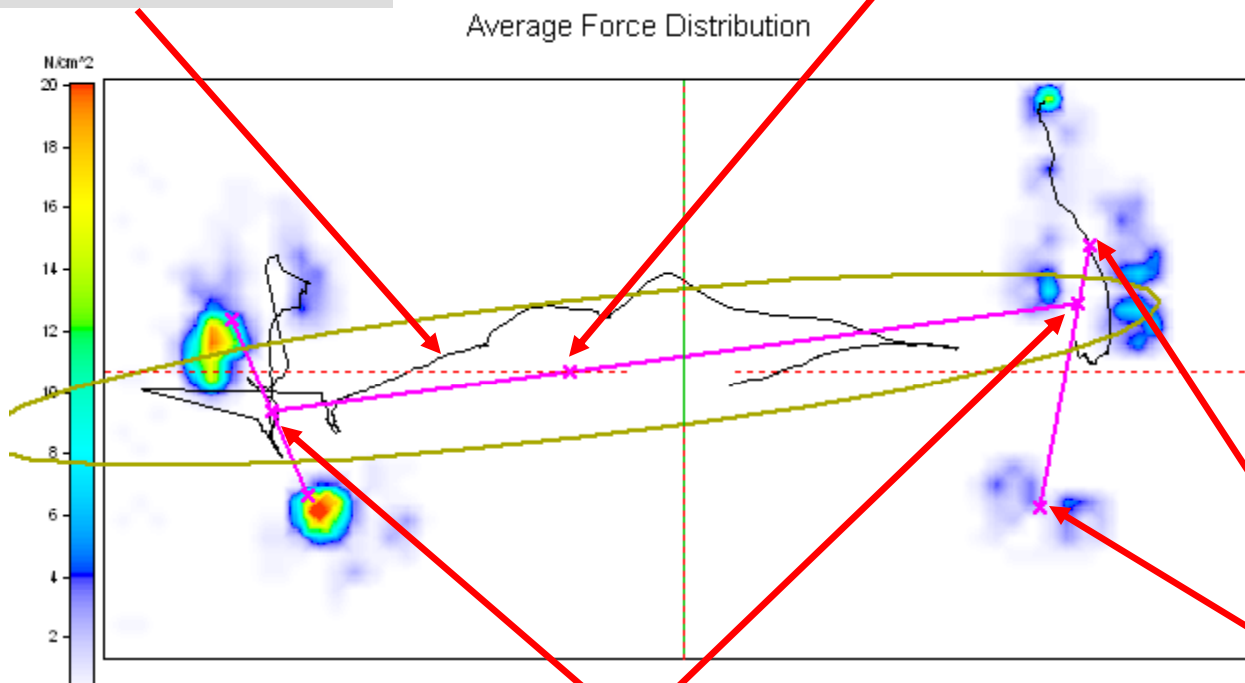
The software allows you to generate printable graphic reports for each recorded force data set.

The following information is displayed:

- average force distribution
- total average COG
- average COG for left and right foot
- average COG for toe/heel
- dynamic curve of total COG
- time curves of forces left/right foot and toe/heel
- average forces as bar charts for total/toe/heel

*dynamic curve of total COG*

*total average COG*



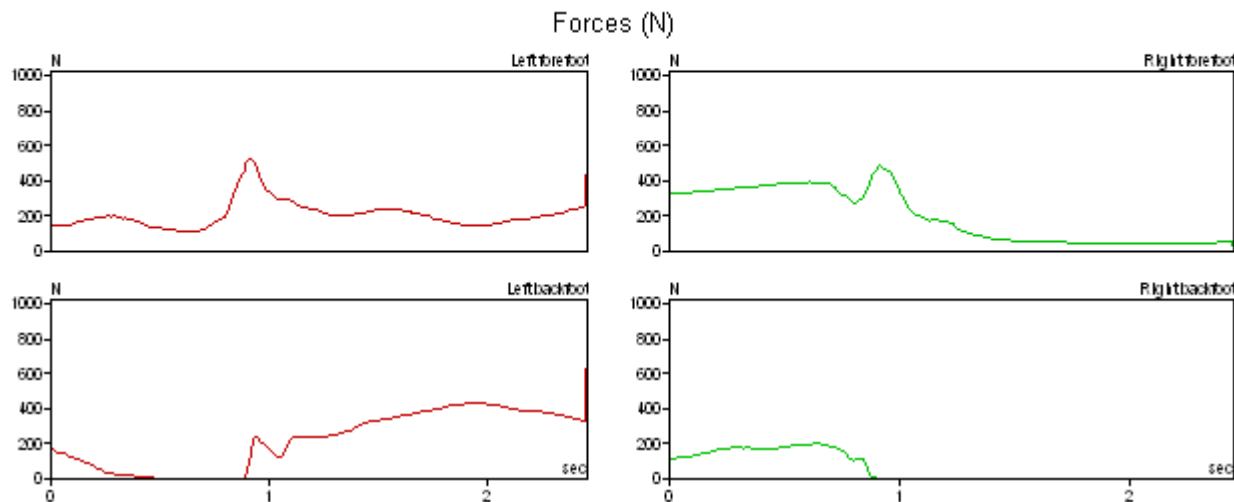
*average COG for left and right foot*

*average COG for forefoot/backfoot*

The curves show the forces for left/right and forefoot/backfoot in separated charts.

*left foot*

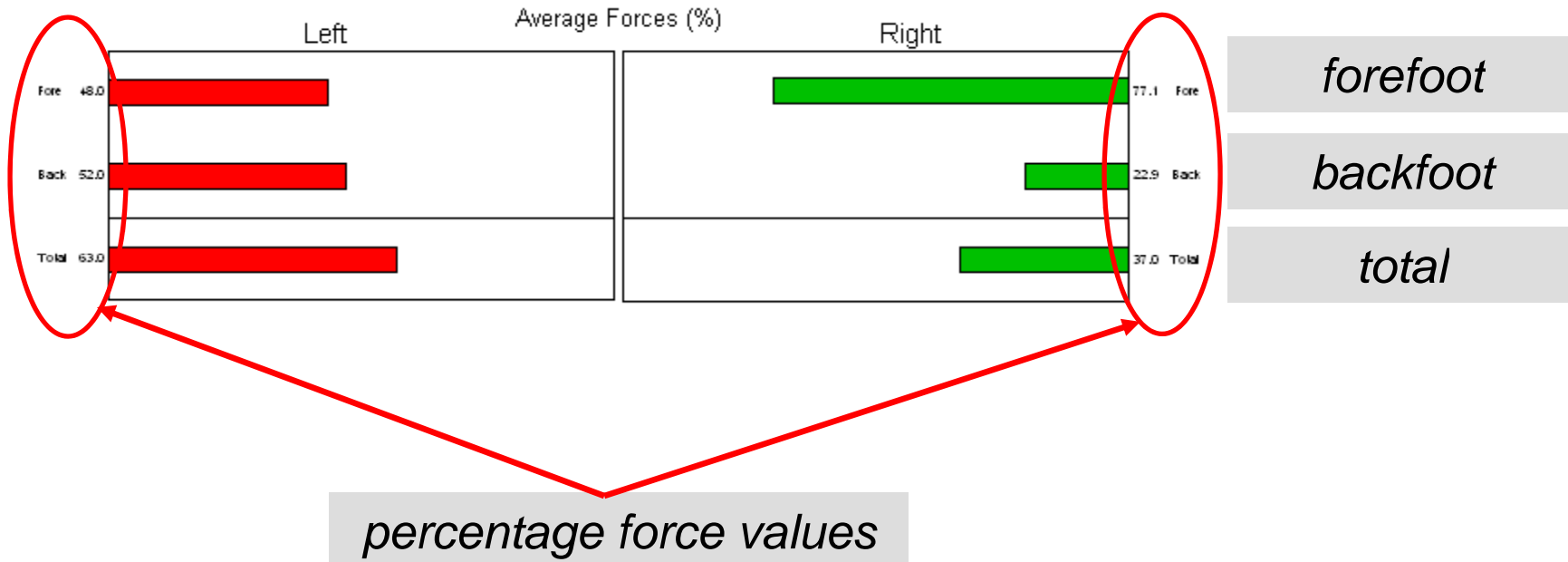
*right foot*



*toe*

*heel*

The bar charts show the average forces for left/right and toe/heel and total force in percentage values:



## **Differences between professional players and amateurs:**

- Amount of weight shift
- Timing of weight shift
- Dynamics of weight shift
- Smoothness of weight shift
- Vertical direction of weight shift vector
- Consistency

- **Science & Motion Sports, LLC**
  - **P.O. Box 14**
    - **Saline, MI 48176**
      - **(734) 206-2120**
        - **[www.samsports.us](http://www.samsports.us)**
          - **[sales@samsports.us](mailto:sales@samsports.us)**